

3. Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (cancelled)
2. (cancelled)
3. (cancelled)
4. (cancelled)
5. (cancelled)
6. (cancelled)
7. (cancelled)
8. (cancelled)
9. (cancelled)
10. (currently amended) A method of constructing a light system comprising a semiconductor wafer and an LED die, comprising the steps of:
 - (a) etching the semiconductor wafer to form a micro-reflector cavity,
wherein the reflector cavity comprises opposing sides, and an angle formed between the opposing sides is about 71°;
 - (b) mounting an LED die within the micro-reflector cavity; and
 - (c) encasing the LED die with an encapsulant, wherein the encapsulant has a refractive index of at least 1.6.
11. (original) The method of claim 10, further comprising the steps of coating the micro-reflector cavity with a conducting material, and connecting one

of a cathode and anode attached to the LED die to the conducting material.

12. (original) The method of claim 11, wherein said step of etching the semiconductor wafer is performed with an etching agent that acts in an anisotropic manner with respect to the semiconductor material.
13. (original) The method of claim 12, wherein the semiconductor material is silicon, and the etchant material is a hydroxide.
14. (original) The method of claim 13, wherein said etchant material is potassium hydroxide.
15. (original) The method of claim 11, wherein the micro-reflector cavity formed in said etching step is shaped as an inverted, truncated pyramid.
16. (cancelled)
17. (original) The method of claim 11, wherein the LED die comprises a red LED, a green LED, and a blue LED.
18. (original) The method of claim 17, wherein said etching step comprises the formation of a plurality of micro-reflector cavities such that the plurality of micro-reflector cavities form a cluster on said wafer.
19. (cancelled)
20. (previously amended) The method of claim 10, wherein said encapsulant is an optical gel.